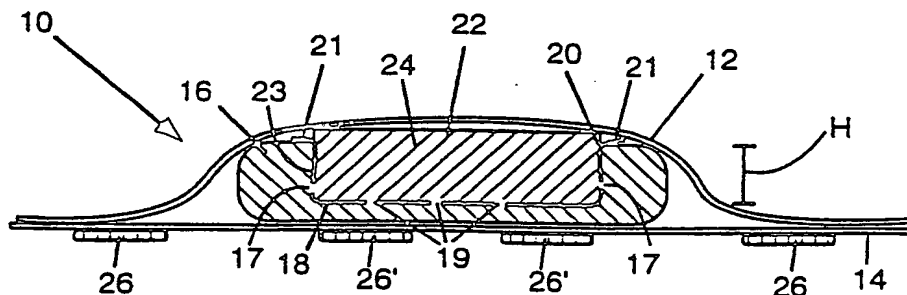


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(21) International Application Number: PCT/US99/22167 (22) International Filing Date: 24 September 1999 (24.09.99) (30) Priority Data: 09/165,875 2 October 1998 (02.10.98) US (71) Applicant: KIMBERLY-CLARK WORLDWIDE, INC. [US/US]; 401 North Lake Street, Neenah, WI 54956 (US). (72) Inventors: CHEN, Fung-jou; 3216 White Birch Lane, Apple- ton, WI 54915 (US). BEDNARZ, Julie, M.; 706 Division Street, Neenah, WI 54956 (US). LINDSAY, Jeffrey, D.; 20 Diane Lane, Appleton, WI 54915 (US). DI PALMA, Joseph; 451 East Peckham Street, Neenah, WI 54956 (US). (74) Agents: PUGLIESE, Sebastian, C., III et al.; 401 N. Lake Street, Neenah, WI 54956 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW). Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
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(54) Title: ABSORBENT ARTICLE HAVING INTEGRAL WICKING BARRIERS



(57) Abstract

An absorbent article comprising a central absorbent member and a lateral wicking barrier for inhibition of wicking from the central regions of the article to an outlying outer absorbent member. The wicking barrier has a vertical component for prevention of radial wicking in the plane of the article and thus promotes center filling of the article with fluid and reduces the likelihood of leaks from the sides of the article. The wicking barrier can also have a horizontal component to prevent leakage, redirect fluid flow, and improve fit and performance of the article. In one embodiment, the central absorbent member is a concentric absorbent structure having alternating rings of barrier material and absorbent material, including a spiral wound composite formed from a layer of barrier material wound with a layer of absorbent material and then sliced to provide a thin absorbent layer having high permeability in the thickness direction but low permeability in the plane due to the barrier material. In a second embodiment the absorbent Core consists out of an outer absorbent member having a central void, open toward the body side of the absorbent article a central absorbent member disposed over and extending into the open void and a wicking barrier disposed between the outer and central absorbent member. In a second embodiment the absorbent core consists out of an outer absorbent member having a central void, open toward the body side of the absorbent article a central absorbent member disposed over and extending into the open void and a wicking barrier disposed between the outer and central absorbent member.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/22167

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F13/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 360 285 A (MCNEIL PPC INC) 28 March 1990 (1990-03-28)	1-13, 15, 17, 19-25, 27-30, 33-36, 39-41, 43, 46, 57-61, 80, 82, 86, 88-90
A	the whole document --- -/--	79, 97



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

15 June 2000

Date of mailing of the international search report

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International Application No

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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

In ational application No.
PCT/US 99/22167

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-61, 79-101, 109-111

Absorbent article having an outer absorbent member having a central void, a central absorbent member disposed in and over the central void, and a wicking barrier disposed between the the outer absorbent member and the central absorbent member.

2. Claims: 62-78 102-108

Absorbent article having a absorbent member surrounded by an outer shaping member with a central void, a baffle layer beneath the absorbent member, and a wicking barrier disposed between the the outer shaping member and the absorbent member.

INTERNATIONAL SEARCH REPORT

In relation on patent family members

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